

STATE OF TENNESSEE

Office of the Attorney General



2004 DEC 23 PM 1:55

T.R.A. DOCKET ROOM

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Reply to:  
Consumer Advocate and Protection Division  
Post Office Box 20207  
Nashville, TN 37202

December 23, 2004

Honorable Pat Miller  
Chairman  
Tennessee Regulatory Authority  
460 James Robertson Parkway  
Nashville, Tennessee 37243

**RE: In Re: Petition of Tennessee-American Water Company for Approval of  
Change in Rates and Charges**

**Docket No. 04-00288**

Dear Chairman Miller:

Enclosed is an original and thirteen copies of the Direct Testimony of Michael D. Chrysler of the Consumer Advocate and Protection Division of the Office of the Attorney General. Kindly file same in this docket. Due to today's inclement weather, the Consumer Advocate was unable to execute the accompanying Affidavit. The Consumer Advocate will execute, file, and serve Mr. Chrysler's Affidavit as soon as practicable. Copies are being sent to all parties of record. If you have any questions, kindly contact me at (615) 741-3533. Thank you.

Sincerely,

A handwritten signature in dark ink, appearing to read "T. C. Phillips".

Timothy C. Phillips  
Senior Counsel

Enclosures

cc: All Parties of Record

81197

Before the

**TENNESSEE REGULATORY AUTHORITY**

**IN RE: PETITION OF TENNESSEE-AMERICAN  
WATER COMPANY FOR APPROVAL OF CHANGE  
IN RATES AND CHARGES  
DOCKET NO. 04-00288**

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**DIRECT TESTIMONY  
OF  
MICHAEL D. CHRYSLER**

\*\*\*\*\*

**December 23, 2004**

**Q-1 Please state your name for the record.**

A-1 My name is Michael D. Chrysler.

**Q-2 By whom are you employed and what is your position?**

A-2 I am employed as a Regulatory Analyst by the Consumer Advocate and Protection Division ("CAPD") in the Office of the Attorney General for the State of Tennessee.

**Q-3 How long have you been employed in the utility industry?**

A-3 Approximately 35 years. Before my employment with the Attorney General, I was employed with Terre Haute Gas Corporation for approximately 2 ½ years and Northern Indiana Public Service Company (NIPSCO) for 24 years.

**Q-4 What is your educational background?**

A-4 I have a Bachelors degree in Business Administration from Fort Lauderdale University (1970) with a major in accounting. Additionally, I have attended numerous "outside" training classes including NARUC Eastern Rate Case School, Arthur Andersen Rate Case School, American Gas Association Rate Case School, and a mini MBA school offered to NIPSCO Senior Management (and invited staff) provided by Purdue University Northwest.

**Q-5 Describe your work experience.**

A-5 Before joining the Consumer Advocate and Protection Division (CAPD), I was employed by Terre Haute Gas Corporation as an Assistant Office Manager. While employed with NIPSCO, I served in various positions in Consumer Accounting, Rate and Contract, Strategic Planning, Consulting Services, and finally as Principal of Electric Business Planning Departments. As a Regulatory Analyst

with the CAPD, I am responsible for analysis and development of utility issues as assigned.

**Q-6 Please describe your involvement with work-related organizations/memberships since you joined the Consumer Advocate and Protection Division.**

A-6 Since joining the Consumer Advocate and Protection Division in 1998, I have been an active participant of the NASUCA (National Association of State Utility Consumer Advocates) Gas and Consumer Protection Committees where I serve as the Chair.

**Q-7 Please detail the responsibilities of Chair of the NASUCA Consumer Protection Committee.**

A-7 The Chair is responsible for communicating relevant Consumer Protection issues, updating the committee representatives of the 42 NASUCA states through email, telephone contact, monthly teleconferences, sponsoring and promoting relevant resolutions, and reporting status to the NASUCA Executive Committee. The Chair is also responsible for determining monthly conference agenda, and development of panel discussion topics, panelists, and Consumer Protection panel moderator for the Mid-Year and Annual NASUCA meetings.

**Q-8 What is the purpose of your testimony in this proceeding?**

A-8 My testimony will deal with the need for Service quality metrics and reporting. The CAPD is very concerned that recent merger and acquisition activity, changes in management philosophy, movement of the Tennessee American Water Company ("TAWC") call center function to Alton, Illinois and movement of the TAWC accounting function to New Jersey places negative pressure on service

quality levels for TAWC consumers. The CAPD understands that TAWC employs service metrics (at least some of which were provided by Tennessee American in response to TRA Data Request #1, Question 15 and CAPD Data Request #1, Question 10 and itemized in number 9 below) as a management balancing tool. The Company should report these service metrics (as detailed further in my testimony) to its Tennessee customers, the TRA, and CAPD and reinstate American Water Works Customer Service Quality Surveys discontinued after 2002. Because TAWC currently tracks service quality internally, reporting of these metrics will be neither unduly burdensome nor expensive.

**Q-9 Can you comment on the Tennessee American Call Center Performance metrics as identified by TRA Staff Data Request #1, Question 15 and followed up by CAPD Data Request #1, Question 10?**

**A-9** Yes, the following metrics were identified by the Company as requested in TRA Staff Data Request #1, Question 15 and followed up by CAPD Data Request #1, Question 10 (**CAPD MDC Schedule 1**):

1. Time to connect the customer to the system;
2. Restoring of water service;
3. New meter installations;
4. Billing inquiries;
5. Meeting appointment times;
6. Meter Reading - percent of meters read; and
7. Customer Satisfaction Surveys - (**CAPD MDC Schedule 1A**) (*discontinued* in 2002).

**Q-10 Was analysis of the performance metrics helpful in determining service quality?**

70 A-10 Yes. With respect to meter reading, TAWC provided an explanation in response  
71 to CAPD Data Request # 10 (F) which shows by percentage the meters read by  
72 month from July, 2003 through September, 2004. This information is contained  
73 in **CAPD MDC Schedule 1)**. During this period TAWC used estimated meter  
74 reading in less than ten percent (10%) of the time, obtaining actual meter readings  
75 in excess of ninety percent (90%) of the time. Actual visits to the customer's  
76 premises are important with respect to accuracy, but also enhance service related  
77 to safety and maintenance issues.

78 **However, responses to the balance of the metrics were less meaningful<sup>1</sup>:**

79 **A. (Time to connect the customer to the system)** - Although the Company  
80 recognizes this as an important metric, they state: "No specific data is tracked to  
81 quantify time to connect the customer beyond this measurement presently on a  
82 monthly basis."

83 **B. (Restoration of Water Service)** - "No specific data for the field work is  
84 tracked for this metric, as these may vary based upon the customer's  
85 circumstances."

86 **C. (New Meter Installation)** - "In general, the average time required to take the  
87 inquiry at the Call Center is on average 5 minutes to handle the inquiry over the  
88 phone." There is no data supporting this assertion.

89 **D. (Billing Inquiries)** - "The field work portion of the work requires  
90 approximately 5-15 minutes, on average, depending on the complexity of the issue

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<sup>1</sup> Paraphrases of TAWC response to CAPD Data Request #10 - reflecting lack of specific statistical responses

and providing an explanation to the customer if they are present when the Field Service Representative (FSR) arrives at their residence. Again, specific data for types of metrics for service are not segregated presently by type of inquiry or by function performed in the field, specific to billing inquiries.”

**E. (Meeting appointment times)** - “No statistical data is currently tracked to determine compliance with meeting appointment times, however, based on calls analyzed periodically for quality monitoring indicates that 86-95% of the calls are handled and the customer is satisfied or very satisfied with the service and response of the company.”

**Q-11 What is your analysis of TAWC’s responses regarding Service quality metrics?**

A-11 My analysis of the Company petition and discovery responses indicates to me that the Company understands the importance of these metrics to the customer. However, the company does not keep track of the all necessary metrics, nor does it report same to the TRA or the CAPD. TAWC should report and refine the statistics on a regular basis to provide a meaningful performance measure.

**Q-12 Does the CAPD have record of a Tennessee utility utilizing and refining performance metrics in quantifying and reporting service quality?**

A-12 Yes Nashville Gas records performance metrics. Attached herewith is **CAPD MDC Schedule 2**. Included as my Schedule 2 exhibit, is a copy of the “Filing Guidelines For Rate Cases” by Nashville Gas Company detailing similar (but more refined data) providing statistical responses for metrics covering “Customer Service”, “Service Department”, and “Construction Department”, “Meter Services”. This is actual data for measuring work performed by employees of

Nashville Gas that provides a meaningful metric for customer service performance, showing the following:

**A. Customer Service: - years 1998 through 2002 for all metrics**

1. # Calls Received (% Answered)
2. Average Answer time (in Minutes)
3. Length of Call (in Minutes)
4. After Call Processing Time (%)
5. Number of Walk-Ins
6. Customer Call Backs
7. Supervisor Referrals
8. Cash Transaction Processed (Nashville)

**B. Service Department - by month/by year**

1. Orders Worked
2. Appointment Orders
3. Appointments Missed
4. Emergency Orders
5. Emergency Response Time (minutes)
6. Meters Set
7. Appliances Installations

**C. Construction Department - By year**

1. TN 1 Call Tickets
2. Service Orders Received
3. Service Orders Installed



- 137 4. Backlog (weeks)
- 138 5. Damages
- 139 6. Service Renewal/Relocate
- 140 7. Services Retired
- 141 8. Survey Leaks

142 **D. Meter Services - By Year**

- 143 1. # of Meters Read
- 144 2. Risers Inspected
- 145 3. Estimates (estimated readings)
- 146 4. Skips
- 147 5. Re-reads
- 148 6. Door tags
- 149 7. DNPs (Did Not Pay) worked

150 **Q- 13 Please discuss the Customer Satisfaction Surveys, as developed by American Water**  
151 **Works, but discontinued in 2003 (see CAPD-MDC Schedule 1A).**

152 A-13 American Water Works was a company truly interested in both the quality of the  
153 product provided and the satisfaction with the service of the product. The attached  
154 CAPD-MDC Schedule 1A is a copy of the Customer Satisfaction Survey last used by  
155 American Water Works. Customers were requested to respond to various service metrics  
156 on a quarterly basis. The metrics included:

- 157 1. Satisfaction with American Water System overall;
- 158 2. Satisfaction with the water quality overall;
- 159 3 Agreement that American Water System is a leader in the water industry; and

160 4. Rating with the utility value received from American Water System.

161 **Q-14 Is it your opinion that TAWC should re-institute the surveys?**

162 A- 14 Yes, re-institution of the customer surveys will provide customers with the ability to  
163 communicate their perception of the product provided and the level of service provided  
164 them by TAWC. Re-institution of the surveys will promote better communication  
165 between TAWC, the TRA and the CAPD.

166 **Q-15 Has the Company improved in service quality for the percentage of meters read on**  
167 **a monthly basis?**

168 A-15 Yes. The CAPD would like to commend the company in respect to its efforts in reducing  
169 estimated meter readings since the last rate case. In **CAPD MDC Schedule 3**<sup>2</sup> included  
170 for reference, TAWC disclosed that estimated meter readings had increased from 1.4%  
171 in 1999 to 19.27% in 2002. TAWC's response to CAPD data request #1, Question 10(F)  
172 (**CAPD MDC Schedule 1**) reflects the percentage of meters read to the mid- 90% in  
173 2004<sup>3</sup>. The CAPD understands that the Company has made a shift to a more flexible  
174 workforce employing temporary employees and assigning various employees based on  
175 need rather than job title. In the final analysis, however, the best way to verify that  
176 customers are being consistently served is through regular reporting of established  
177 service metrics.

178 **Q-16 Is Meter Reading the only element of Service quality of concern to the**  
179 **Consumer Advocate and Protection Division in this rate request?**

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<sup>2</sup> CAPD MDC Schedule 3 which was Question 69 and response by TAWC (in 03-00118) detail of estimated vs Actual bills rendered for years 1997 through 2002 detailing % of estimated bills per year

<sup>3</sup> CAPD MDC Schedule 1, response to CAPD Data Request #1, Question 10(F) (% of meters read)

A-16 No. Meter Reading is only one barometer of concern. The CAPD continues to enjoy a positive working relationship with the representatives of TAWC. However, the new owners of TAWC have changed the focus of the Company from a water utility concerned with providing a good product and good service to a water company more concerned with increasing its rate of return. The Company is focused on “finances first” leaving “service quality” as a second tier consideration, as indicated by:

1. Removal of Customer Satisfaction Surveys - An important concern of American Water Works (RWE’s decreased interest in the perceived value of the product and services provided is shown by its decision to end the surveys);
2. “Top - Down Financial Goals” prescribed by RWE/Thames and floated down the various companies (detailed in Dr. Brown’s testimony<sup>4</sup>); and
3. Frequent rate filings<sup>5</sup> (in several states) - reflecting Corporate goals focusing primarily on earnings.

The new, “Tennessee American” should re-focus its efforts on service quality, as it once did. Regular reporting of metrics for quality of service benchmarks are an initial first step in this regard.

**Q-17 What “Performance Metrics” are you proposing to be reported to Tennessee Consumers?**

A-17 The CAPD Proposed Performance Metrics are similar to the service standards identified by Nashville Gas Company and reported in my **CAPD MDC Schedule 2** (which was a response to CAPD Data Request #1, Question #8 TRA Docket #03-00313) for reference,

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<sup>4</sup> Testimony of Dr. Steve Brown, in TRA Docket #04-00288 pp 14-18

<sup>5</sup> Id.

and adaptations of customer service expectations; i.e., Customer Service, Service Department, Meter Services, and Construction metrics slightly modified to incorporate the performance metrics identified by the Company and reported earlier in my testimony. CAPD believes that the establishment (and regular reporting) of service metrics provide a standard of service for one point in time that will provide a standard of comparison for future periods. Service metrics will also answer the question (in real terms) of any actual benefit that new technology may provide, as well as identify any service quality issues that may need to be addressed in future proceedings.

**Q-18 Please detail the suggestions for service metrics by function.**

**A-18** The following service metrics can provide a “first step” in being able to answer the question regarding a continuity of service quality (reported on a monthly basis).

**1. Customer Service - Call Center**

- A. # Calls Received
- B. Average Answer Time (Minutes)
- C. Handle Time (Minutes)
- D. Supervisor Referrals

**2. Service Department**

- A. Orders Worked
- B. Appointment Orders (% on-time)
- C. Appointments Missed
- D. Emergency Orders Worked
- E. Emergency Response Time (Minutes)

**3 Meter Reading**

224 A. % of meters read

225 B. Meters not read (6 and 12 months)

226 4. **Customer Satisfaction Surveys** - The CAPD proposes the re-  
227 implementation of Customer Satisfaction Surveys<sup>6</sup> (with the addition of  
228 Call Center and response time satisfaction surveys) and reporting of same  
229 on a quarterly basis to the Tennessee Regulatory Authority. **The survey questions**  
230 **should request customer response to the following service metrics:**

231 A. Satisfaction with Ease in Reaching Tennessee American Water (Call  
232 Center) - Goal of 90% satisfaction;

233 B. Satisfaction with water quality - Goal of 90% satisfaction;

234 C. Satisfaction with Call Center operation - Goal of 90% satisfaction;

235 D. Satisfaction with response time for service problems - Goal of 90%  
236 satisfaction; and

237 E. Rating with utility value received from Tennessee American Water -  
238 Goal of 80% satisfaction.

239 **Q-19 Please summarize your recommendations in this case.**

240 A-19 The American Water System Customer Satisfaction Company Overall Measures  
241 by Quarter last reported in 2002 (**CAPD MDC Schedule 1A**) reflected a large  
242 water system operating in numerous states and quite concerned with the quality of  
243 product sold and the service incorporated in delivering it to the customer. Further,  
244 it actively solicited responses by its customers to those issues (presumably to

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<sup>6</sup> (**CAPD MDC Schedule 1A**) American Water System, customer Satisfaction Company Overall Measures - *Discontinued in 2002*

promote improvements to the product or the service provided )

In reviewing the data provided by the Company and analysis, we now find new ownership that seems to be driven more by profits and financial goals “Top-down directed” annual financial return goals, annual rate requests, and an end to the customer service surveys reflect a company less interested in quality of service for a “World Class Water Company”<sup>7</sup> than its predecessor, American Water Works.

The CAPD is hopeful that the Company will seek to communicate and nurture credibility with its customers, the TRA, the CAPD and plans on reinforcing its service quality goals by adding an emphasis on continuing to provide a good product and consistently good service. Monthly reporting of service quality metrics along with quarterly surveys to Tennessee consumers would be an effective method to meet this challenge.

**Q-20 Does this conclude your testimony?**

**A-20** Yes.

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<sup>7</sup> As benchmarked by American Water Works Surveys (CAPD MDC Schedule 1A).

**BEFORE THE TENNESSEE REGULATORY AUTHORITY  
AT NASHVILLE, TENNESSEE**

**IN RE: PETITION OF TENNESSEE-AMERICAN )  
WATER COMPANY FOR APPROVAL OF CHANGE ) DOCKET NO. 04-00288  
IN RATES AND CHARGES )  
)**

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**AFFIDAVIT**

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**STATE OF TENNESSEE )**

**COUNTY OF DAVIDSON )**

Before me, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared, Michael D. Chrysler, being by me first duly sworn deposed and said that:

He is appearing as a witness on behalf of the Consumer Advocate and Protection Division of the Tennessee Attorney General's Office and if present before the Authority and duly sworn, his testimony is set forth in the annexed transcript consisting of \_\_\_\_\_ pages.

\_\_\_\_\_  
MICHAEL D. CHRYSLER

Sworn to and subscribed before me  
this \_\_\_\_ day of \_\_\_\_\_, 2004

\_\_\_\_\_  
NOTARY PUBLIC

My commission expires: \_\_\_\_\_

ODMA\GRPWISE\sd05 IC01S01 JSB1 81191 1

**BEFORE THE  
TENNESSEE REGULATORY AUTHORITY  
AT NASHVILLE, TENNESSEE**

**IN RE:**

**PETITION OF TENNESSEE-AMERICAN WATER COMPANY FOR  
APPROVAL OF CHANGE IN RATES AND CHARGES**

**DOCKET NO. 04-00288**

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**EXHIBITS  
OF  
MICHAEL D. CHRYSLER**

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**December 23, 2004**



Interrogatories and Requests for Production  
Of Documents by the  
Attorney General (First Set)  
To Tennessee-American Water Company  
Rate Case No. 04-00288

10 Q THE FOLLOWING CALL CENTER PERFORMANCE METRICS WAS IDENTIFIED IN RESPONSE TO TRA STAFF DATA REQUEST #1, QUESTION 15 (PROVIDE THE PAST THREE YEARS MONTHLY DATA FOR EACH METRIC,)

A Time to connect the customer to the system

**Response:**

B Restoring of water service

**Response:**

C New meter installations

**Response:**

D Billing inquiries

**Response:**

E Meeting appointment times

**Response**

F Meter Reading – percent of meters read

**Response**

G Customer Satisfaction Surveys – provide a copy of survey responses since 2001

**Response**

A Time to connect the customer to the system

Response Normally, a customer that contacts the company for water service will be asked whether they prefer to have service connected in the morning or afternoon on a

**Interrogatories and Requests for Production  
Of Documents by the  
Attorney General (First Set)  
To Tennessee-American Water Company  
Rate Case No. 04-00288**

**Docket No. 04-00034  
Exhibit CAPD-MDC  
Schedule 1  
Page 2 of 4**

particular date. A service order is then generated and generally, a request that is received on Day One is executed on Day 2. Service orders that are worked on a particular day are completed in the computerized customer service system by 7:00 p.m. the same day. Emergency service orders are generally made available immediately to the local field service representative to be worked as soon as they are notified. Therefore, in the normal course of business, the average time to connect a customer is two days. Day 1 is the day the customer contacts us, Day 2 the service order request is completed in the field and entered into the computer the same day. The actual field work to connect a customer to the system if existing service has been available at the residence is 10-15 minutes plus travel time. No specific data is tracked to quantify time to connect the customer beyond this measurement presently on a monthly basis. If the property requesting connection to the system is not currently served, then TAW has a process in place to facilitate the installation of a service line, meter setting and water meter to serve the property. Again, the company works with the property owner or the builder to schedule the installation of these facilities to meet the needs of the customer. In general, the average time required to take the inquiry at the Call Center is on average 5 minutes to handle the inquiry over the phone.

**B Restoration of Water Service**

**Response:** Service is restored within 24 hours and in most cases in less time than that. Restoration for non-payment of service is performed the same day, so long as the payment is verified by 4:00 p.m. that day. If service is disconnected for plumbing repairs, service restoration will also occur the same day, so long as the order is generated prior to 6:00 p.m. Again, in this case no specific data for the field work is tracked for this metric, as these may vary based upon the customer's circumstances. Restoration of service is also required for situations involving repair of customer plumbing facilities, or for restoration of service resulting from non-payment for service. Typically, turning on service to an existing customer, in either case, requires that the customer notify the company that they have paid the outstanding amount or the plumbing repair is completed and are ready to have the field service representative dispatched to restore water service at the premises. Such an inquiry, on average requires 5 minutes via phone to handle the inquiry from the customer and to create a work order to schedule the reconnection. The actual field work to restore water service to an existing residential customer is between 10-15 minutes plus travel time. No specific monthly data is tracked to quantify the actual field work specifically for this activity presently.

**C New Meter Installation**

**Response:** A new meter installation is performed as part of the function involved in installing a new service line to serve a new residence, that has not previously received service. If the property requesting connection to the system is not currently served, then TAW has a process in place to facilitate the installation of a service line, meter setting and water meter to serve the property. Again, the company works with the property owner or the builder to schedule the installation of these facilities to meet the needs of the customer. In general, the average time required to take the inquiry at the Call Center is on average 5 minutes to handle the inquiry over the phone.

**D Billing Inquiries**

**Interrogatories and Requests for Production  
Of Documents by the  
Attorney General (First Set)  
To Tennessee-American Water Company  
Rate Case No. 04-00288**

Response Billing inquiries are generally considered to include rereading the meter in preparation for billing, reading the meter as the result of a high or low bill for service received by the customer, request for a meter test, final bill for service, and check for a leak. The average handle time for a customer inquiry by phone to the Call Center is 5 minutes or less, and this includes scheduling the order. The field work portion of the work requires approximately 5-15 minutes, on average, depending on the complexity of the issue and providing an explanation to the customer if they are present when the Field Service Representative (FSR) arrives at their residence. If the customer is not present when the billing inquiry is performed, then the Call Center personnel will contact the customer by phone to inform them of the result of the visit by the FSR. Again, specific data for types of metrics for service are not segregated presently by type of inquiry or by function performed in the field, specific to billing inquiries. Overall, the work presented to the FSR is performed on the date scheduled, however, if it cannot be performed because of field conditions (customer required to home to meet FSR, etc.) then a door hanger is also provided to identify the findings at the residence and the work order is completed by the FSR. Finally, if a meter test is required as part of a billing inquiry, the meter is delivered to TAW meter testing facility, and is tested in accordance with industry standards. Such a test requires approximately a total time of 1 hour to complete, however, meters of like size and type are generally tested as a group, and a meter test for 12 meters of the same size in the test bench, would require the same labor input of approximately 1 hour.

**E Meeting appointment times**

Response Currently, we practice a schedule which provides that the customer is given a preference for either morning or afternoon to have the field service representative perform the customer's request. Appointments for a specific time are not practiced, unless we are unable to leave the water on to the premises. With outside meter settings, our policy allows us to leave the water on when a customer moves out, and then if no one moves in within 30 days, we then shut off the service to the property. Once the water at the meter is discontinued, we are allowed to turn water on even if the customer is not at home. The field service representative watches the meter, and if it continues to register, it will be left off, and we reschedule a time the customer can be at home. Our evening shift has expanded to handle calls until midnight in the last 18 to 20 months and we are able to be more flexible in meeting the customer's expectations when required. As such, the goal is to meet every appointment within the time frame required. No statistical data is currently tracked to determine compliance with meeting appointment times, however, based on calls analyzed periodically for quality monitoring indicates that 86-95% of the calls are handled and the customer is satisfied or very satisfied with the service and response of the company.

**F Meter Reading-percent of meters read**

**Response**

The percentage of meters read is shown by month. Meters are read on a monthly basis.

July 2003	92.37%
August 2003	88.73%
September 2003	92.18%
October 2003	92.70%
November 2003	98.38%

**Interrogatories and Requests for Production  
Of Documents by the  
Attorney General (First Set)  
To Tennessee-American Water Company  
Rate Case No. 04-00288**

**Docket No. 04-00034  
Exhibit CAPD-MDC  
Schedule 1  
Page 4 of 4**

December 2003	95.54%
January 2004	98.01%
February 2004	93.61%
March 2004	96.78%
April 2004	97.97%
May 2004	98.75%
June 2004	97.19%
July 2004	96.31%
August 2004	98.02%
September 2004	91.97%

- G Customer Satisfaction Surveys-provide a copy of survey responses since 2001
- RESPONSE Copies of the First Quarter and Year to Date 2002 Survey,  
Third Quarter and Year to Date 2002 Survey,  
and Fourth Quarter and Year to Date 2002 Survey  
are attached. The Tennessee operations was not evaluated in the  
second quarter survey. No customer satisfaction survey data has  
been conducted in 2003 or 2004.

**ORC** INTERNATIONAL<sup>®</sup>

November 2002



American Water System

**Customer Satisfaction  
Company Overall Measures  
Fourth Quarter**

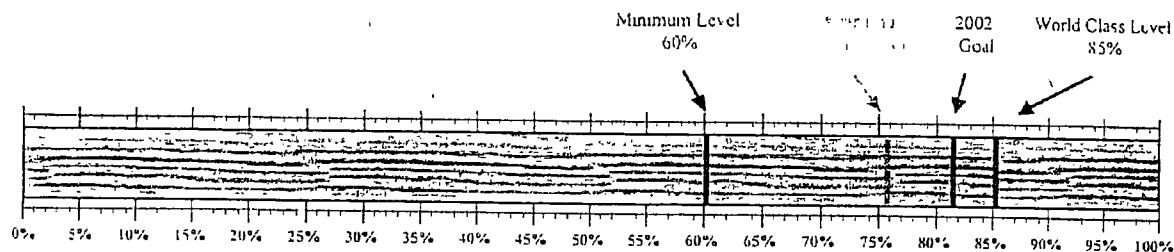
Date Surveys Mailed 9/26/2002

## Customer Satisfaction Summary

### 1. Satisfaction with American Water System overall:

- 75.72% of our customers are satisfied with American Water System overall
- 24.27% of our customers are not satisfied with American Water System overall
- The year end 2001 weighted score for total satisfaction was 77.83%

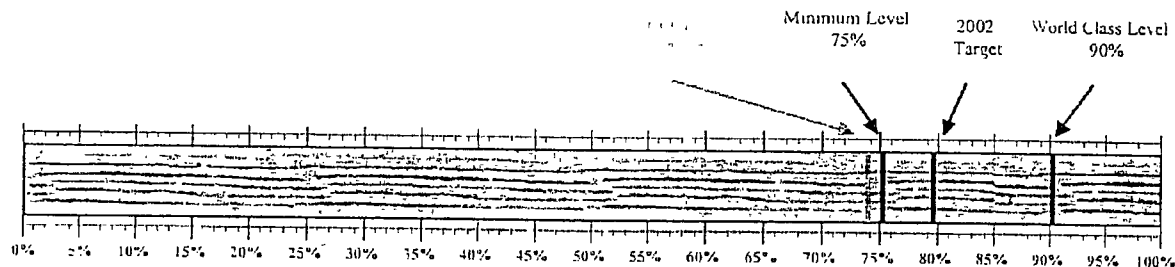
⇒ Our company goal for 2002 is to have 81.42% of our customers satisfied with American Water System overall. At year end\* 2002, we are below our 2002 goal by 5.70%.



### 2. Satisfaction with the water quality overall:

- 75.66% of our customers are satisfied with the water quality overall
- 24.34% of our customers are not satisfied with the water quality overall
- The year end 2001 weighted score for total satisfaction was 75.61%

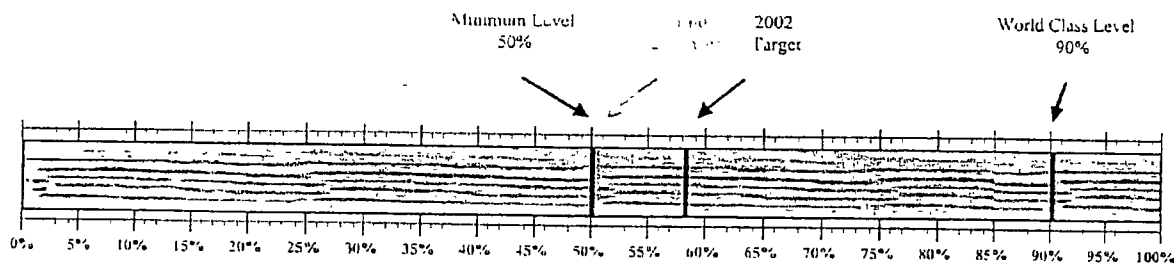
⇒ Our company target for 2002 is to have 79.51% satisfied with the water quality overall. At year end\* 2002 we are below our target by 3.85%.



### 3. Agreement that American Water System is a leader in the water industry:

- 50.38% of our customers agree that we are leader in the water industry
- 49.62% of our customers do not agree that we are a leader in the water industry
- The year end 2001 weighted score for total agreement was 50.78%

⇒ Our company target for 2002 is to have 58.78% agree that we are a leader in the water industry. At year end\* 2002 we are below our target by 8.40%.

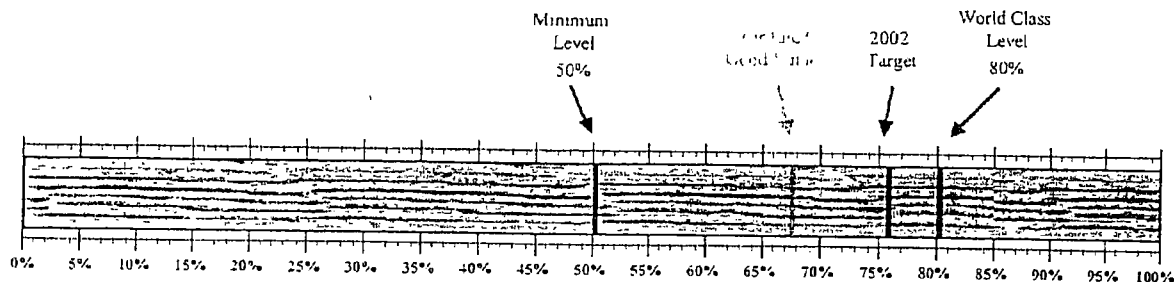


\* Year end equals Quarter 3 + Quarter 4 2002

4 Rating with the utility value received from American Water System

- 67.60% of our customers responded that they receive a good value for their utility dollar
- 15.03% of our customers responded that they do not receive a good value for their utility dollar
- The year end 2001 weighted score for total good value response was 70.97%

➡ Our company target for 2002 is to have 75.67% of our customers respond that they receive a good value for their utility dollar. At year end 2002 we are below our target by 8.07%.



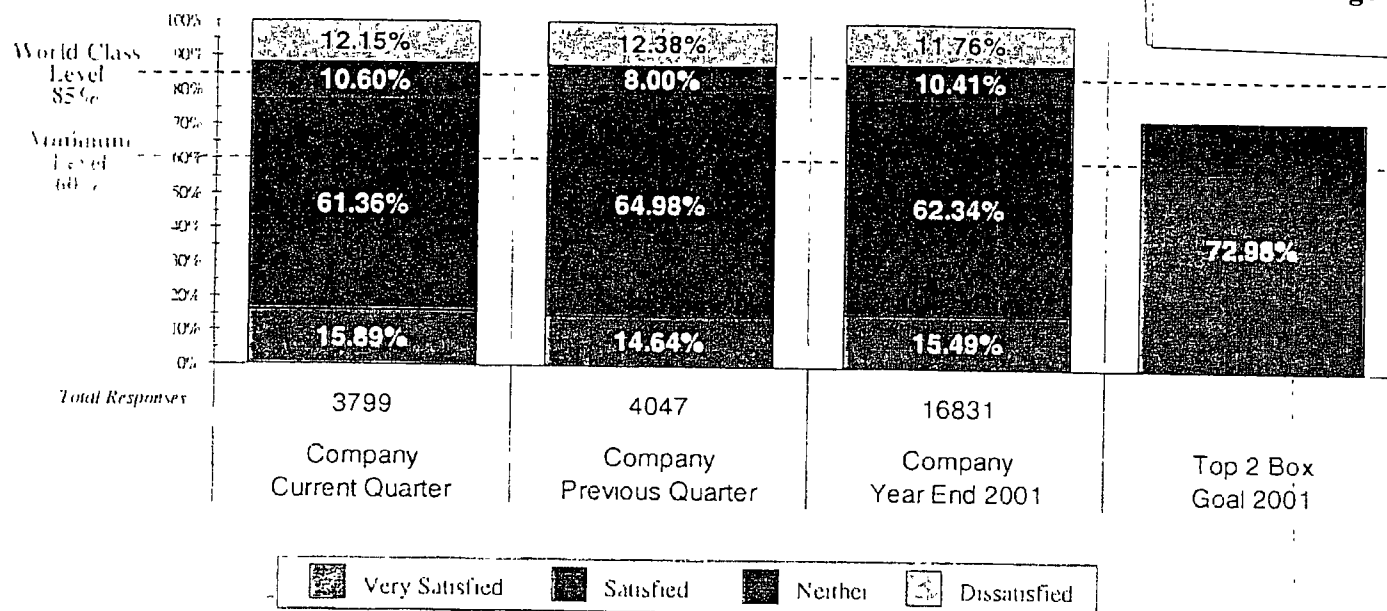
Satisfaction with American Water System Overall

Top Ten Operations

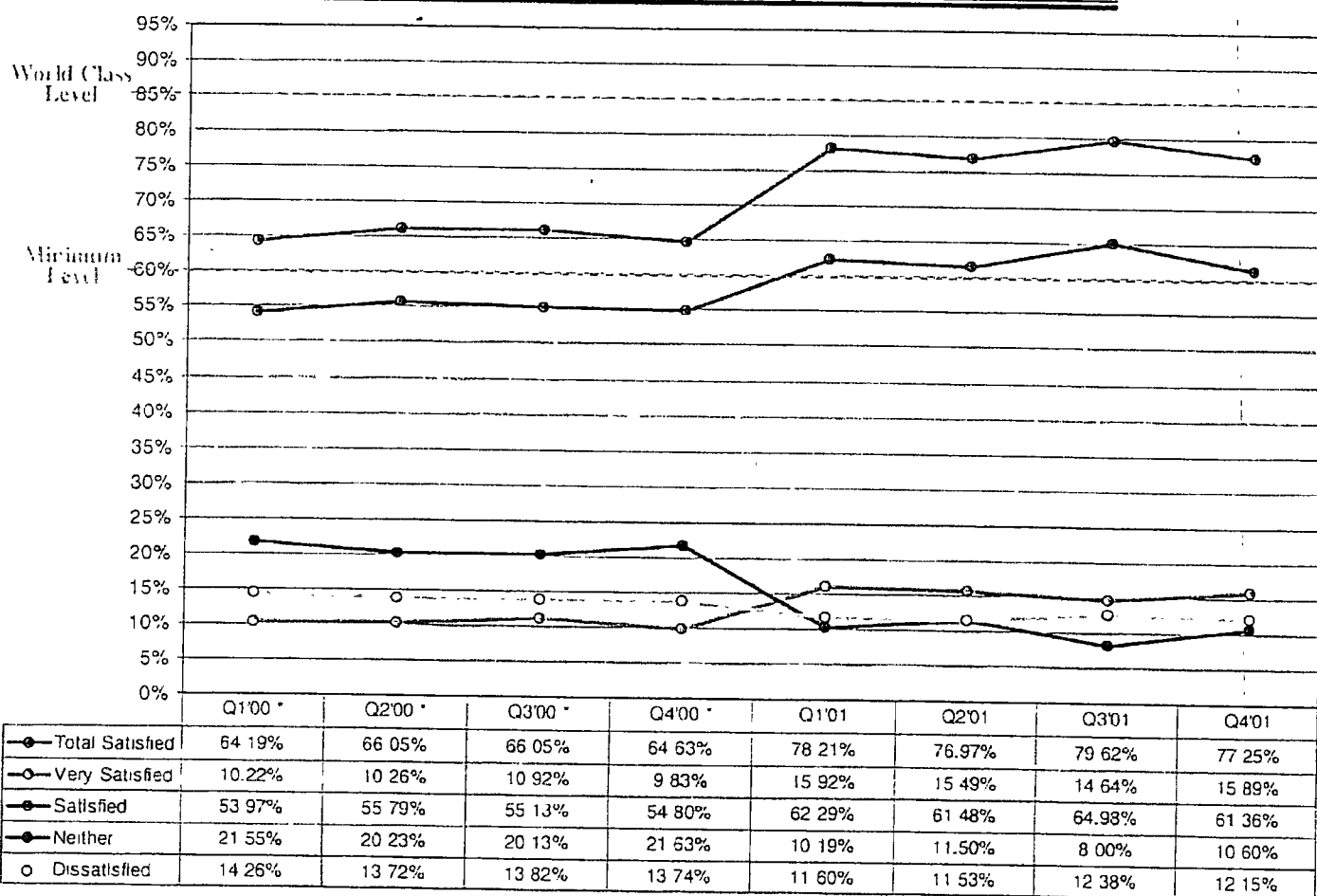
Current Quarter Rank	Utility Subsidiary	Operations	Year End * Total Satisfied	Previous Quarter Rank
1	W VIRGINIA	NORTHERN	88.32%	1
2	PENNSYLVANIA	WESTERN	87.37%	8
3	MISSOURI	CENTRAL	87.27%	6
4	MISSOURI	EASTERN	86.93%	9
5	KENTUCKY	KENTUCKY	86.85%	5
6	PENNSYLVANIA	PITTSBURGH	86.11%	2
7	ILLINOIS	EASTERN	85.80%	4
8	TENNESSEE	TENNESSEE	83.87%	12
9	NEW JERSEY	SOUTHWESTERN	81.94%	3
10	MICHIGAN	MICHIGAN	81.46%	13

\* Year end equals Quarter 3 + Quarter 4 2002

## Satisfaction with American Water System Overall



## Satisfaction with American Water System Overall Trend



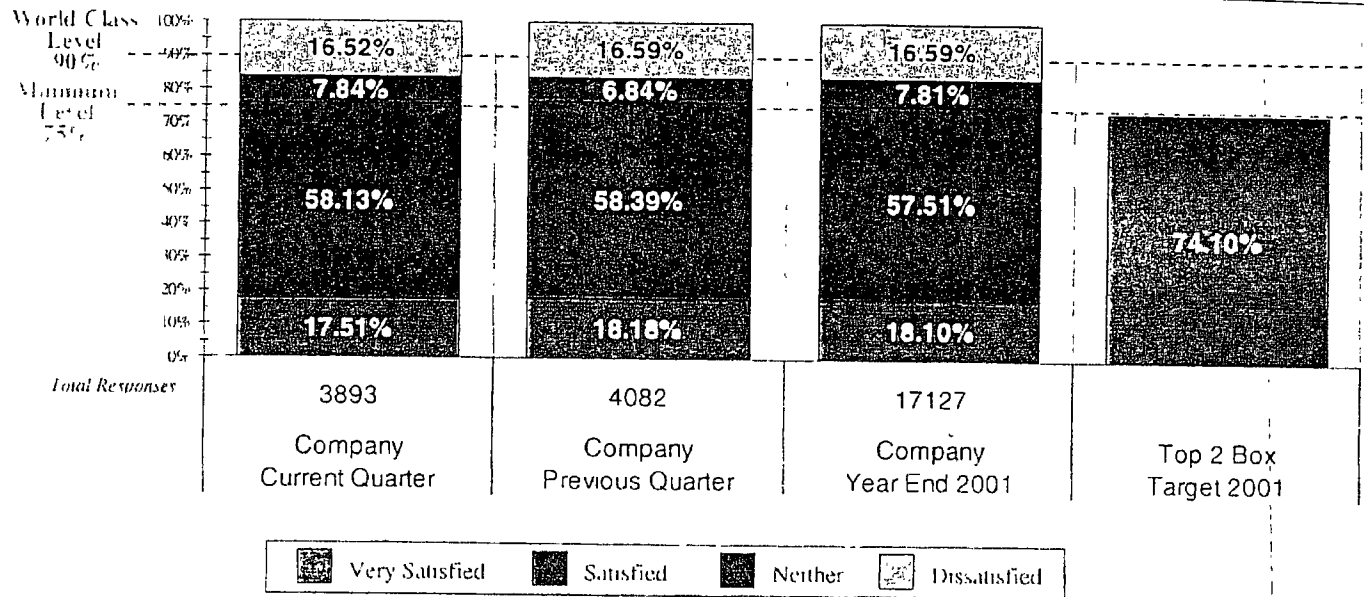
\* Results not weighted



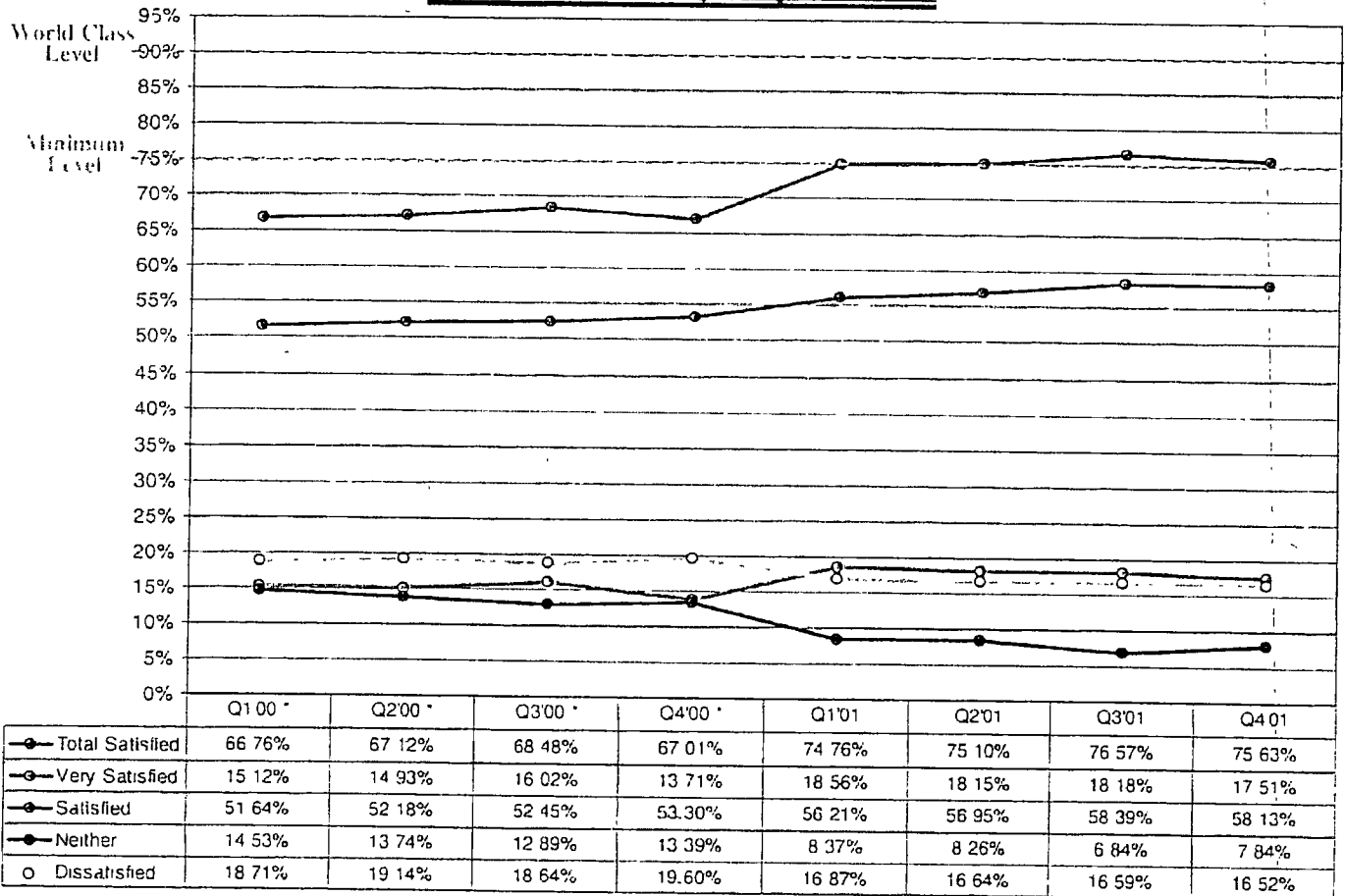
## Satisfaction with American Water System Overall

Region	Utility Subsidiary	Operations	Curr Qtr. Total Resp	Current Quarter Total Sat	Prev Quarter Total Sat	Curr / Prev Quarter Change	Year End 2001 Total Sat	2001 Goal	Over/ Under Goal	2002 Goal	Year End Total Satisfaction Ranking			
												Rgn	Util	Sub Oper
American Water System			3799	77 25%	79 62%	(2 37%)	77 83%	72 98%	4 85%	81 42%				
IL-IA	Illinois		362	80 90%	81 46%	(0 56%)	81 64%	74 65%	6 99%	84 38%	3			
			246	79 60%	79 85%	(0 25%)	80 70%	75 10%	5 60%	83 79%		6		
		Eastern	66	81 09%	79 79%	1 31%	80 45%	74 31%	6 14%	83 88%				13
		Northern	90	84 66%	83 68%	0 97%	78 94%	71 99%	6 95%	82 53%				15
		Southern	90	74 52%	76 86%	(2 34%)	82 26%	79 30%	2 96%	85 51%				9
IN-MI-OH	Iowa	Iowa	116	85 95%	87 70%	(1 76%)	85 30%	77 40%	7 90%	87 98%		2		4
			487	75 04%	73 69%	1 35%	74 36%	69 36%	5 0%	78 74%	5			
		Indiana	355	77 35%	72 88%	4 47%	74 32%	70 41%	3 91%	79 36%		14		
		Central	83	82 96%	63 13%	19 33%	73 35%	71 62%	1 73%	79 21%				28
		Eastern	112	66 59%	77 24%	(10 65%)	73 37%	71 04%	2 34%	79 23%				27
Missouri	Missouri		80	83 75%	80 46%	3 29%	78 38%	73 16%	5 21%	82 61%				17
		Northwest	80	79 09%	68 81%	10 28%	71 50%	63 91%	7 59%	77 98%				31
		Southern	59	72 88%	79 31%	(6 43%)	73 01%	74 66%	(1 65%)	78 43%		15		29
		Michigan	73	61 10%	78 10%	(17 0%)	74 74%	71 28%	3 46%	79 66%		13		26
		Ohio												
Northeast	Missouri		405	83 64%	86 85%	(3 21%)	83 26%	79 07%	4 20%	85 81%	1	3		
		Central	99	79 32%	77 50%	1 82%	79 87%	66 55%	13 33%	84 81%				14
		Eastern	111	88 58%	94 57%	(5 99%)	89 93%	87 00%	2 93%	89 93%				1
		Southwestern	87	68 97%	73 63%	(4 66%)	67 92%	63 96%	3 96%	75 17%				33
		Western	108	54 10%	36 53%	17 57%	40 17%	53 38%	(13 21%)	54 00%				41
Northeast	Connecticut	Connecticut	903	73 53%	75 21%	(1 67%)	73 18%	69 75%	3 43%	77 83%	6			
			108	74 07%	68 04%	6 03%	71 97%	71 54%	0 43%	N/A		16		30
		Hampton	1	100 00%	73 08%	26 92%	77 64%	66 19%	11 45%	N/A		8		18
		Long Island	124	64 52%	66 67%	(2 15%)	65 26%	68 17%	(2 90%)	71 99%		19		34
	Massachusetts	Massachusetts	105	43 06%	54 70%	(11 65%)	48 47%	62 85%	(14 38%)	N/A		22		40
			474	76 32%	79 18%	(2 86%)	76 56%	72 86%	3 70%	81 35%		11		
		Central	80	55 57%	53 50%	2 07%	58 44%	68 05%	(9 61%)	67 40%				36
		Northeastern	85	80 00%	86 17%	(6 17%)	77 05%	76 93%	0 12%	82 48%				21
		Northwestern	101	77 20%	75 45%	1 75%	75 97%	72 41%	3 57%	81 58%				23
		Southeastern	100	73 00%	74 74%	(1 74%)	76 38%	71 92%	4 46%	81 92%				22
		Southwestern	108	80 56%	86 81%	(6 26%)	82 66%	76 88%	5 79%	87 18%				7
	New York	New York	89	65 17%	62 79%	2 38%	63 80%	69 10%	(5 31%)	N/A		20		35
		Salisbury	2	100 00%	62 79%	37 21%	53 79%	58 94%	(5 15%)	N/A		21		39
Pennsylvania	Pennsylvania		593	78 12%	79 35%	(1 24%)	76 79%	72 79%	3 99%	80 61%	4	10		
		Eastern	151	80 79%	86 01%	(5 22%)	78 69%	75 23%	3 46%	82 06%				16
		Northeast	110	64 28%	56 69%	7 59%	57 72%	57 93%	(0 22%)	66 44%				37
		Pittsburgh	108	81 48%	87 96%	(6 48%)	84 21%	76 86%	7 35%	86 28%				5
		Western	224	87 70%	90 52%	(2 82%)	88 86%	81 48%	7 38%	89 85%				2
Southeast	Kentucky	Kentucky	711	75 59%	84 51%	(8 92%)	82 23%	76 87%	5 36%	84 84%	2			
			94	69 15%	93 26%	(24 11%)	82 40%	76 00%	6 40%	85 24%		4		8
		Maryland	75	81 33%	76 74%	4 59%	77 53%	67 42%	10 11%	81 18%		9		19
		Tennessee	74	78 38%	86 57%	(8 19%)	85 53%	79 18%	6 35%	87 85%		1		3
	Virginia	Virginia	65	76 03%	83 40%	(7 37%)	80 48%	71 98%	8 50%	83 64%		7		12
		W Virginia	403	78 06%	78 73%	(0 67%)	81 40%	79 24%	2 16%	84 40%		5		
		Central	98	73 85%	76 18%	(2 33%)	83 39%	81 45%	1 95%	86 32%				6
		Northern	93	90 40%	82 01%	8 40%	81 52%	82 30%	(0 78%)	84 80%				10
		Southern	105	89 56%	80 94%	8 62%	80 73%	80 75%	(0 01%)	84 16%				11
		Western	107	79 13%	82 76%	(3 63%)	77 19%	74 00%	3 19%	81 31%				20
Western	Arizona	Arizona	338	69 06%	69 19%	(0 13%)	68 95%	65 73%	3 22%	74 59%	7			
			47	68 09%	71 43%	(3 34%)	68 91%	65 50%	3 41%	74 56%		17		32
		California	200	69 09%	69 71%	(0 62%)	68 19%	65 47%	2 72%	74 10%		18		
		Central	107	55 14%	58 56%	(3 42%)	56 38%	56 44%	(0 06%)	62 81%				38
	New Mexico	Southern	93	77 11%	76 13%	0 98%	74 98%	69 43%	5 55%	79 83%				24
		New Mexico	91	69 23%	64 38%	4 85%	74 93%	68 76%	6 17%	78 43%		12		25

## Satisfaction with the Overall Water Quality



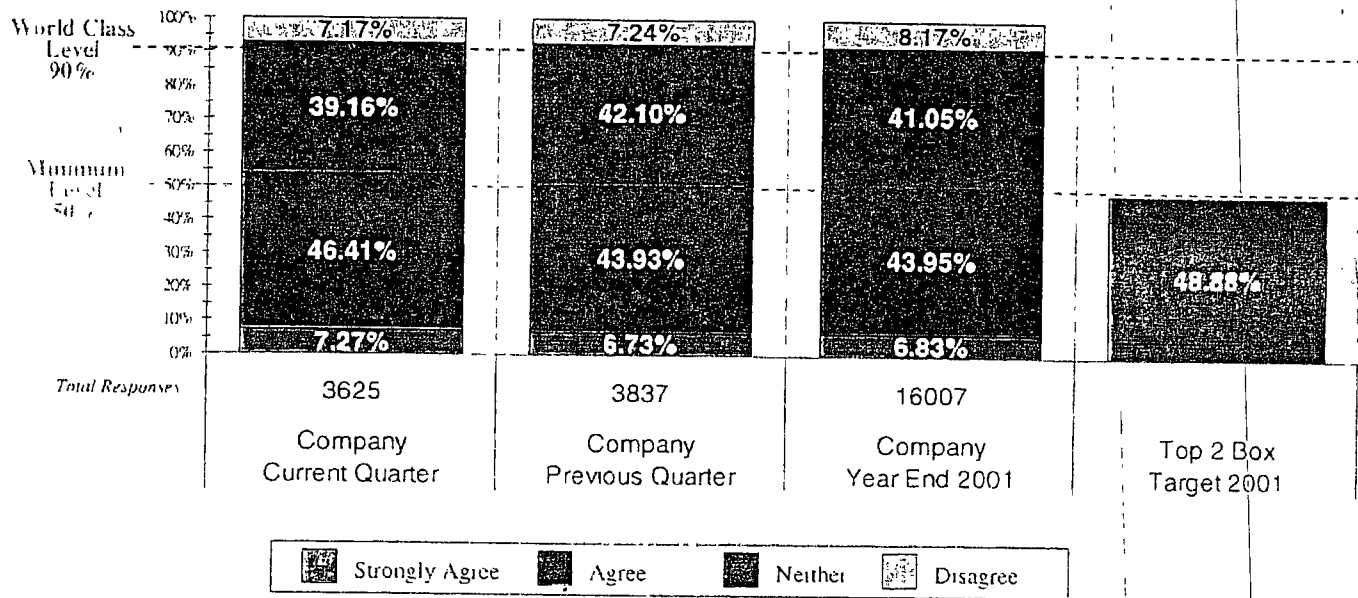
## Overall Water Quality Trend



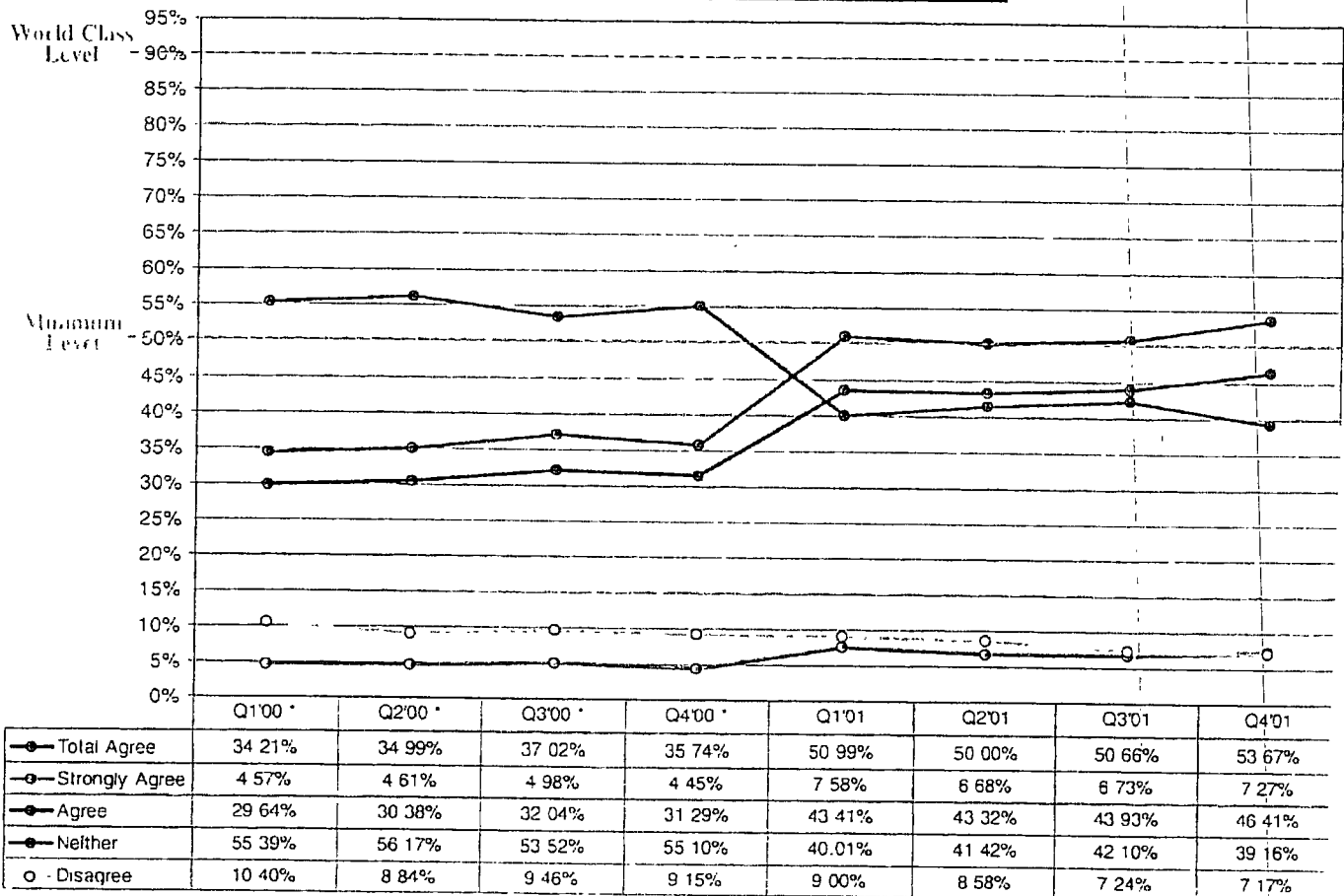
# Satisfaction with the Overall Water Quality Rank

			Curr.	Current	Prev	Curr /	Year End					Year End		
Utility			Qtr	Quarter	Quarter	Prev	2001		Over/		Total			
Region	Subsidiary	Operations	Total	Total	Total	Quarter	Total	2001	Under/	2002	Satisfaction	Util	Sub	
			Resp.	Sat	Sat	Change	Sat	Target	Target	Target	Ranking		Oper	
American Water System			3893	75 63%	76 57%	(0 93%)	75 61%	74 10%	1 51%	79 51%	Rgn			
IL-IA	Illinois		363	81 01%	78 83%	2 18%	80 34%	76 24%	4 10%	81 99%	3			
			245	81 63%	77 13%	4 50%	79 43%	75 48%	3 95%	81 17%		5		
		Eastern	65	87 55%	84 62%	2 93%	83 57%	77 06%	6 51%	84 86%			5	
		Northern	91	80 91%	73 83%	7 08%	74 09%	69 77%	4 32%	76 43%			22	
	Southern	89	77 90%	74 29%	3 61%	80 63%	78 49%	2 14%	82 24%			10		
	Iowa	Iowa	118	78 61%	85 43%	(6 82%)	83 86%	79 13%	4 73%	85 15%		2	4	
IN-MI-OH	Indiana		497	74 16%	73 20%	0 96%	74 10%	73 20%	0 90%	78 46%	4			
			364	74 22%	72 16%	2 06%	73 30%	73 86%	(0 56%)	78 49%		12		
		Central	85	78 68%	63 73%	14 95%	73 95%	72 67%	1 28%	79 70%			23	
		Eastern	116	65 46%	70 69%	(5 23%)	70 39%	73 91%	(3 52%)	77 36%			27	
	Northwest	82	87 80%	88 37%	(0 57%)	81 12%	79 52%	1 60%	84 49%			8		
	Southern	81	62 87%	63 88%	(1 01%)	65 77%	72 82%	(7 04%)	74 38%			33		
	Michigan	Michigan	59	74 58%	83 05%	(8 47%)	77 63%	74 19%	3 44%	80 67%		7	16	
	Ohio	Ohio	74	73 73%	78 65%	(4 93%)	78 70%	74 01%	4 69%	81 21%		6	15	
	Missouri	Missouri	422	83 40%	87 89%	(4 49%)	84 03%	76 73%	7 30%	84 17%	1	1		
		Central	104	83 61%	82 04%	1 57%	80 69%	63 11%	17 58%	81 19%			9	
Eastern		112	88 27%	96 25%	(7 98%)	90 81%	84 56%	6 25%	90 81%			1		
Southwestern		92	67 39%	62 77%	4 62%	66 39%	57 76%	8 63%	67 90%			32		
Western	114	53 47%	37 51%	15 96%	41 31%	27 01%	14 30%	44 71%			41			
Northeast			933	72 74%	70 06%	2 68%	70 58%	71 65%	(1 07%)	75 55%	6			
	Connecticut	Connecticut	115	73 91%	76 00%	(2 09%)	75 91%	74 00%	1 91%	N/A		10	20	
	Hampton	Hampton	1	100 00%	70 37%	29 63%	69 09%	70 31%	(1 22%)	N/A		17	31	
	Long Island	Long Island	128	63 28%	56 62%	6 66%	59 84%	66 36%	(6 52%)	68 96%		21	36	
	Massachusetts	Massachusetts	109	58 39%	66 38%	(8 0%)	61 07%	70 62%	(9 55%)	N/A		19	35	
	New Jersey		487	74 62%	72 72%	1 90%	73 03%	73 69%	(0 66%)	77 71%		13		
		Central	84	58 93%	55 47%	3 46%	58 70%	68 42%	(9 72%)	67 79%			37	
		Northeastern	88	72 73%	75 79%	(3 06%)	70 56%	73 89%	(3 33%)	76 35%			26	
		Northwestern	103	74 15%	65 18%	8 97%	71 42%	70 63%	0 79%	76 99%			25	
		Southeastern	100	76 00%	77 55%	(1 55%)	77 53%	79 82%	(2 29%)	81 54%			18	
		Southwestern	112	81 25%	80 00%	1 25%	79 20%	77 37%	1 83%	82 79%			13	
	New York	New York	91	68 13%	65 88%	2 25%	70 06%	76 91%	(6 85%)	N/A		15	29	
	Salisbury	Salisbury	2	100 00%	75 61%	24 39%	63 36%	65 74%	(2 38%)	N/A		18	34	
	Pennsylvania	Pennsylvania		601	71 91%	72 58%	(0 67%)	71 65%	73 76%	(2 11%)	76 44%	5	14	
		Eastern	155	78 29%	73 40%	4 89%	72 67%	77 37%	(4 70%)	77 15%			24	
		Northeast	112	47 48%	52 63%	(5 15%)	51 16%	57 33%	(6 17%)	62 76%			39	
		Pittsburgh	109	79 82%	80 73%	(0 92%)	79 71%	77 05%	2 66%	82 08%			12	
		Western	225	85 78%	85 76%	0 02%	85 34%	78 46%	6 88%	86 08%			3	
Southeast			733	76 96%	83 27%	(6 31%)	80 82%	76 32%	4 50%	82 40%	2			
	Kentucky	Kentucky	95	70 53%	84 62%	(14 09%)	77 55%	73 98%	3 57%	79 96%		8	17	
	Maryland	Maryland	77	77 92%	72 09%	5 83%	75 00%	73 09%	1 91%	77 88%		11	21	
	Tennessee	Tennessee	79	83 54%	82 61%	0 94%	83 23%	78 38%	4 85%	84 61%		4	6	
	Virginia	Virginia	67	70 25%	84 24%	(13 99%)	76 23%	70 07%	6 16%	78 88%		9	19	
	W Virginia		415	80 31%	82 73%	(2 42%)	83 51%	78 91%	4 60%	84 62%		3		
		Central	102	80 02%	82 53%	(2 51%)	86 24%	81 97%	4 27%	86 24%			2	
		Northern	94	83 37%	85 05%	(1 68%)	81 38%	80 72%	0 66%	82 75%			7	
		Southern	108	83 20%	80 57%	2 63%	78 78%	76 91%	1 87%	80 47%			14	
Western		111	78 83%	84 06%	(5 23%)	80 33%	72 92%	7 41%	81 83%			11		
Western			344	65 03%	64 30%	0 73%	61 65%	63 57%	(1 93%)	68 85%	7			
	Arizona	Arizona	44	54 55%	64 91%	(10 37%)	57 44%	60 30%	(2 86%)	65 77%		22	38	
	California		208	65 33%	65 04%	0 29%	60 80%	62 66%	(1 86%)	68 22%		20		
		Central	115	46 09%	44 25%	1 84%	44 64%	55 69%	(11 05%)	54 75%			40	
		Southern	93	76 40%	77 01%	(0 61%)	70 10%	66 88%	3 22%	75 15%			29	
	New Mexico	New Mexico	92	66 30%	58 33%	7 97%	69 77%	73 13%	(3 36%)	74 96%		16	30	

## Agreement that American Water System is a leader in the Water Industry



## Leader in Water Industry Overall Trend

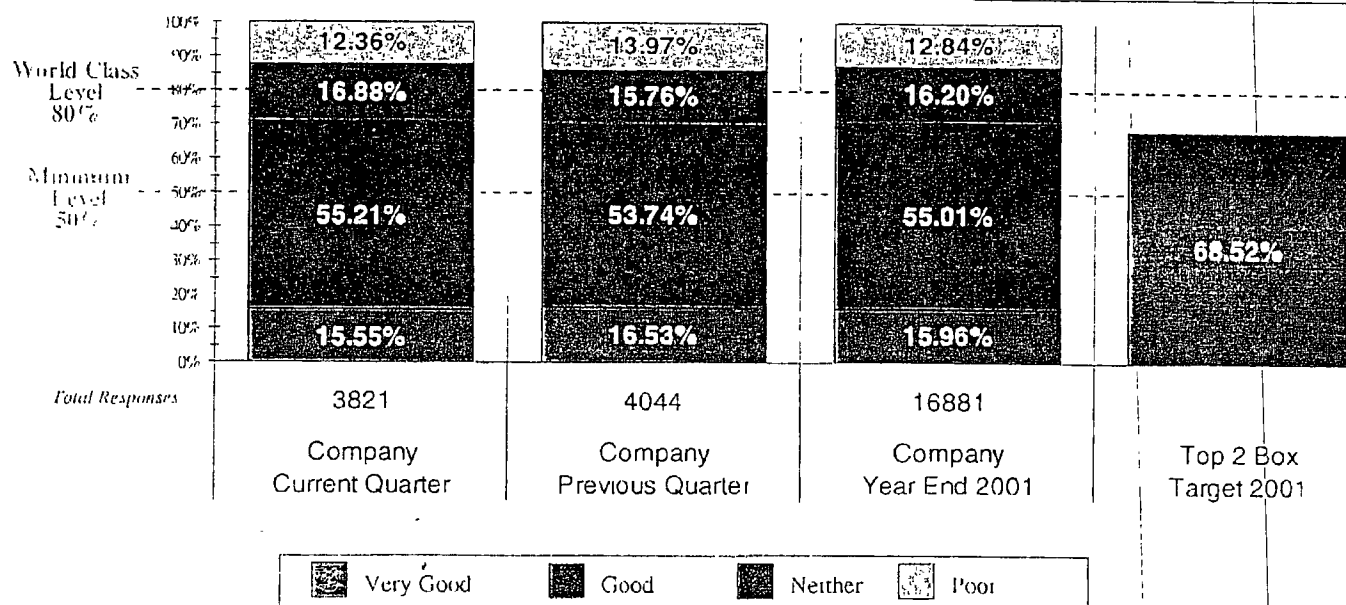


\* Results not weighted

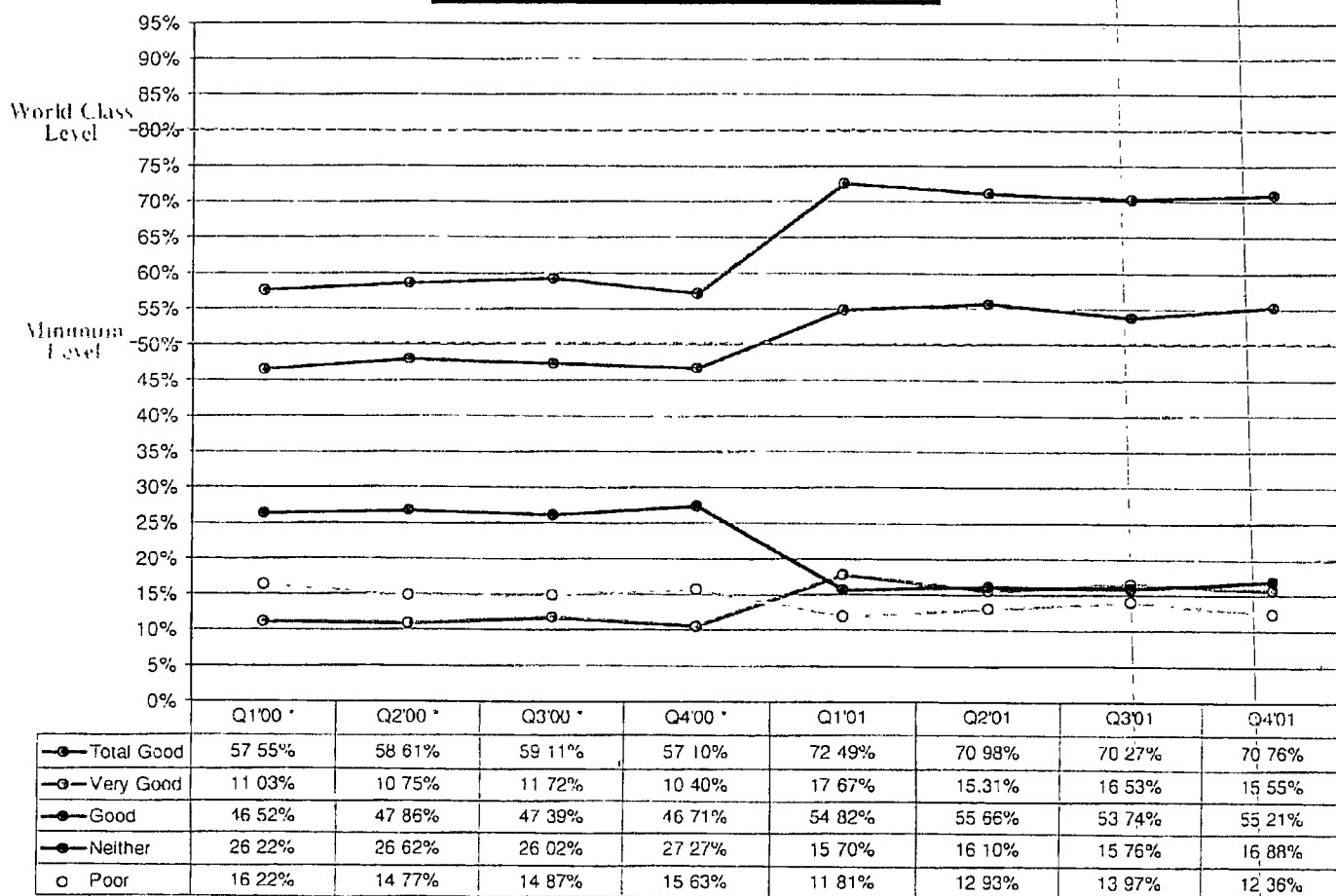
# Agreement that American Water System is a leader in the Water Industry

Region	Utility Subsidiary	Operations	Curr Qtr Total Resp.	Current Quarter Total Agr	Prev Quarter Total Agr	Curr / Prev Quarterly Change	Year End 2001 Total Agr	2001 Target	Over/Under Target	2002 Target	Year End Total Agreement Ranking	Rgn	Util	Sub	Oper
American Water System			3625	53 67%	50 66%	3 01%	50 78%	48 88%	1 90%	58 78%					
IL-IA			339	62 48%	54 31%	8 17%	55 09%	53 08%	2 01%	62 46%	2				
	Illinois		223	62 26%	52 52%	9 73%	54 55%	53 13%	1 41%	62 19%		4			
		Eastern	56	63 34%	46 02%	17 32%	42 37%	40 70%	1 67%	59 77%					24
		Northern	85	63 87%	56 01%	7 86%	55 37%	55 22%	0 14%	64 03%					13
	Iowa	Iowa	82	60 20%	54 51%	5 69%	62 77%	56 20%	6 57%	66 97%					6
			116	63 32%	61 21%	2 11%	57 18%	51 28%	5 90%	63 51%		3			9
IN-MI-OH			464	47 99%	43 39%	4 60%	45 84%	44 88%	0 96%	54 70%	5				
	Indiana		336	47 68%	41 07%	6 61%	44 58%	44 76%	(0 18%)	53 91%		12			
		Central	76	44 55%	31 07%	13 48%	39 26%	45 32%	(6 06%)	51 39%					28
		Eastern	104	43 44%	41 81%	1 63%	42 25%	44 64%	(2 39%)	53 03%					25
		Northwest	78	55 13%	55 56%	(0 43%)	56 87%	45 83%	11 04%	62 26%					11
		Southern	78	49 56%	33 74%	15 82%	38 86%	45 33%	(6 48%)	51 17%					31
	Michigan	Michigan	56	44 64%	49 12%	(4 48%)	45 45%	43 83%	1 62%	54 46%		11			20
	Ohio	Ohio	72	50 19%	57 08%	(6 89%)	53 61%	45 85%	7 76%	59 81%		5			14
Missouri	Missouri		392	55 55%	44 06%	11 49%	51 49%	49 46%	2 03%	59 38%	4	8			
		Central	99	46 78%	39 25%	7 53%	43 53%	35 07%	8 46%	54 42%					22
		Eastern	104	59 03%	45 92%	13 11%	55 82%	53 04%	2 78%	63 49%					12
		Southwestern	90	46 67%	45 56%	1 11%	40 53%	45 56%	(5 03%)	52 42%					27
		Western	99	36 07%	30 42%	5 65%	26 11%	20 93%	5 18%	45 23%					41
Northeast			849	47 14%	44 34%	2 73%	45 39%	45 66%	(0 26%)	54 34%	6				
	Connecticut	Connecticut	97	31 96%	34 78%	(2 82%)	35 80%	40 78%	(4 98%)	N/A		17			34
	Hampton	Hampton	1	100 00%	40 00%	60 00%	41 96%	41 74%	(0 22%)	N/A		13			26
	Long Island	Long Island	123	38 21%	39 84%	(1 63%)	39 07%	43 82%	(4 75%)	49 05%		14			30
	Massachusetts	Massachusetts	98	25 78%	32 65%	(6 87%)	27 64%	40 77%	(13 13%)	N/A		22			39
	New Jersey		445	50 26%	47 23%	3 03%	48 85%	46 37%	2 48%	56 83%		10			
		Central	75	40 14%	31 90%	8 24%	37 95%	44 36%	(6 41%)	49 96%					32
		Northeastern	75	56 00%	44 57%	11 43%	46 99%	45 79%	1 20%	55 58%					19
		Northwestern	95	37 50%	42 21%	(4 71%)	43 23%	43 75%	(0 52%)	53 15%					23
		Southeastern	94	42 55%	41 11%	1 44%	47 37%	46 20%	1 17%	55 84%					17
		Southwestern	106	64 15%	62 65%	1 50%	60 21%	49 43%	10 78%	64 87%					7
	New York	New York	83	38 55%	32 89%	5 66%	37 82%	42 47%	(4 65%)	N/A		16			33
	Salisbury	Salisbury	2	50 00%	32 50%	17 50%	28 68%	39 71%	(11 03%)	N/A		20			37
Pennsylvania	Pennsylvania		574	55 98%	56 76%	(0 78%)	52 18%	51 98%	0 20%	59 96%	3	7			
		Eastern	147	48 27%	49 02%	(0 74%)	47 15%	53 23%	(6 08%)	57 72%					18
		Northeast	106	50 54%	57 64%	(7 10%)	39 17%	50 93%	(11 76%)	54 61%					29
		Pittsburgh	108	55 56%	58 82%	(3 27%)	57 03%	52 80%	4 23%	62 27%					10
		Western	213	68 06%	59 94%	8 12%	65 46%	54 35%	11 11%	66 50%					3
Southeast			689	59 14%	63 00%	(3 87%)	59 47%	56 59%	2 87%	66 30%	1				
	Kentucky	Kentucky	93	55 91%	65 52%	(9 60%)	53 48%	53 95%	(0 47%)	63 03%		6			15
	Maryland	Maryland	70	32 86%	35 90%	(3 04%)	35 22%	49 49%	(14 27%)	51 80%		18			35
	Tennessee	Tennessee	74	60 81%	70 00%	(9 19%)	69 76%	64 65%	5 11%	75 05%		1			2
	Virginia	Virginia	64	33 62%	43 67%	(10 05%)	34 81%	49 92%	(15 11%)	51 60%		19			36
	W Virginia		388	69 74%	65 62%	4 12%	67 66%	61 79%	5 87%	73 45%		2			
		Central	95	80 93%	66 47%	14 45%	72 97%	64 14%	8 83%	77 72%					1
		Northern	89	62 13%	68 77%	(6 63%)	62 90%	64 16%	(1 26%)	69 68%					5
		Southern	99	62 87%	65 19%	(2 32%)	63 63%	63 35%	0 28%	70 24%					4
		Western	105	49 26%	63 40%	(14 14%)	58 57%	55 58%	2 99%	66 31%					8
Western			318	40 34%	42 07%	(1 73%)	38 89%	42 52%	(3 63%)	49 34%	7				
	Arizona	Arizona	42	33 33%	25 49%	7 84%	27 84%	40 11%	(12 27%)	38 97%		21			38
	California		188	39 27%	43 57%	(4 30%)	37 85%	42 35%	(4 50%)	48 58%		15			
		Central	99	27 27%	29 46%	(2 19%)	27 53%	40 89%	(13 36%)	46 71%					40
		Southern	89	46 17%	51 69%	(5 52%)	43 78%	41 24%	2 54%	50 51%					21
	New Mexico	New Mexico	88	51 14%	36 11%	15 03%	50 90%	45 24%	5 66%	57 00%		9			16

## Overall Utility Value Rating

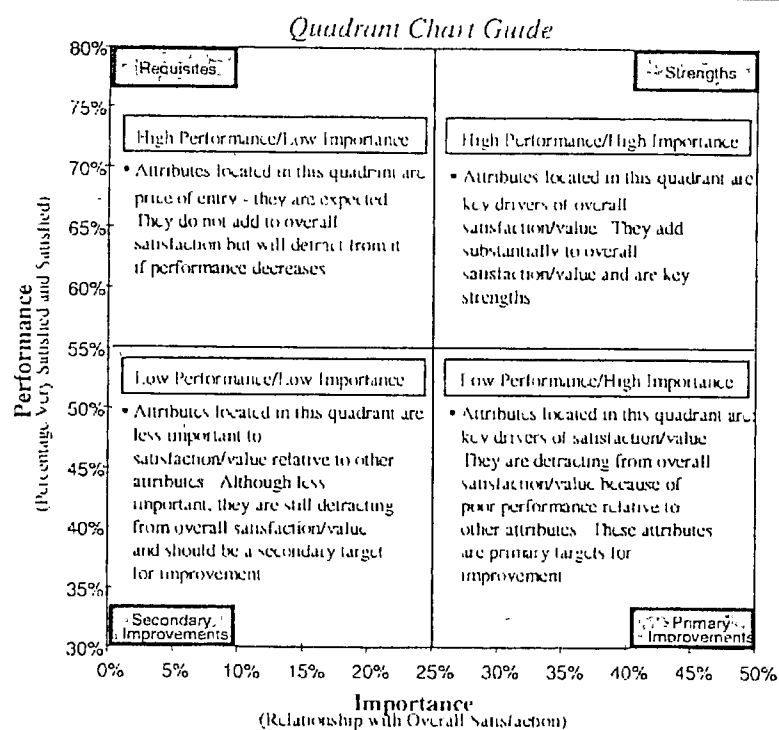


## Overall Utility Value Trend

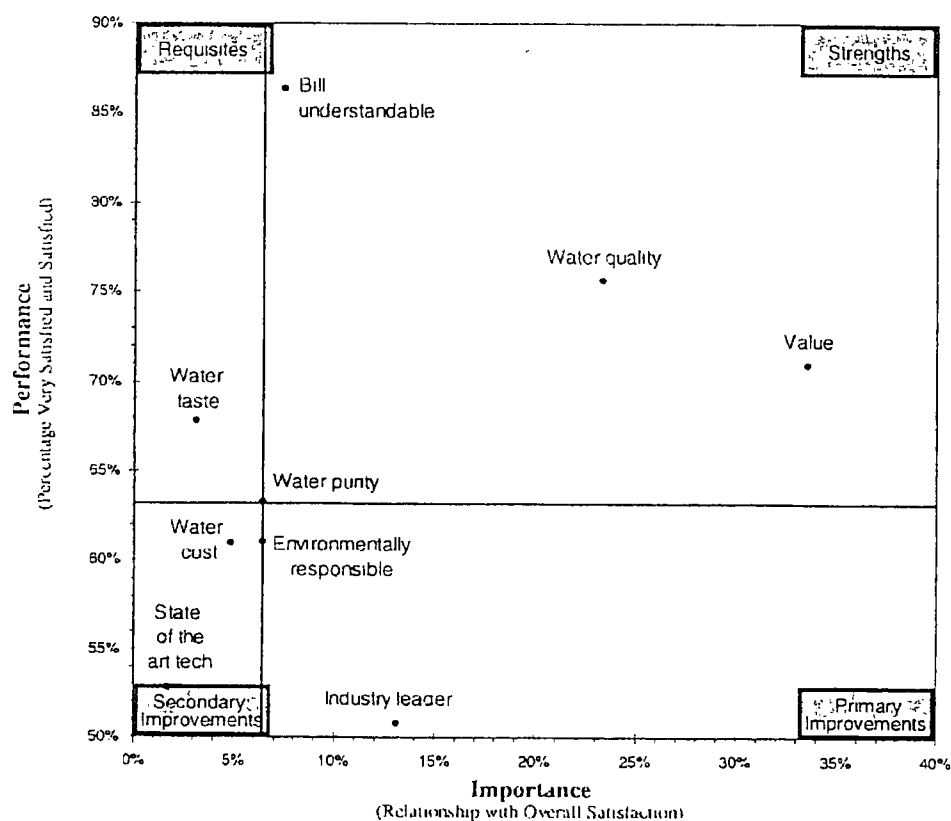


# Overall Utility Value Rating

Region	Utility Subsidiary	Operations	Curr Qtr Total Resp	Current Quarter Total Good	Prev Quarter Total Good	Curr / Prev Quarter Change	Year End 2001 Total Good	2001 Target	Over/ Under Target	2002 Target	Year End Total Good Ranking	Rgn	Util	Sub	Oper
American Water System			3821	70 76%	70 27%	1 49 %	70 97%	68 52%	2 45 %	75 67%					
IL-IA	Illinois		366	75 77%	76 71%	(0 94%)	75 30%	71 26%	4 05 %	79 12%	3				
		Eastern	247	76 07%	77 60%	(1 53%)	75 52%	71 44%	4 08 %	79 31%			4		
		Northern	66	71 31%	74 54%	(3 24%)	74 08%	69 90%	4 18 %	78 44%					11
		Southern	91	76 09%	78 89%	(2 79%)	73 67%	68 11%	5 57 %	78 09%					12
	Iowa	Iowa	90	79 52%	78 82%	0 71 %	78 02%	76 24%	1 78 %	81 77%					5
			119	74 61%	73 26%	1 35 %	74 48%	70 59%	3 89 %	78 40%			6		8
IN-MI-OH	Indiana		484	65 34%	67 09%	(1 75%)	69 36%	65 26%	4 00 %	74 32%	5				
		Central	353	66 92%	66 39%	0 53 %	69 69%	65 42%	4 28 %	74 60%			9		
		Eastern	82	67 60%	64 62%	2 98 %	72 02%	66 71%	5 31 %	77 25%					18
		Northwest	111	65 46%	65 94%	(0 48%)	70 95%	65 01%	5 94 %	76 37%					21
		Southern	80	70 00%	72 09%	(2 09%)	71 77%	70 69%	1 08 %	77 04%					19
	Michigan	Michigan	80	63 84%	61 38%	2 46 %	60 16%	61 68%	(1 52%)	67 63%					29
	Ohio	Ohio	57	56 14%	58 93%	(2 79%)	55 41%	66 60%	(11 19%)	63 00%			18		34
			74	56 54%	72 13%	(15 59%)	68 56%	64 20%	4 36 %	73 66%			13		26
Missouri	Missouri		410	76 07%	75 61%	0 46 %	75 90%	71 78%	4 12 %	78 90%	2		3		
		Central	102	72 03%	76 78%	(4 75%)	74 40%	64 08%	10 32 %	80 19%					9
		Eastern	111	79 81%	79 60%	0 21 %	80 85%	80 19%	0 66 %	85 00%					3
		Southwestern	90	67 78%	75 00%	(7 22%)	70 45%	63 93%	6 52 %	77 26%					23
		Western	107	52 49%	44 17%	8 32 %	40 39%	48 34%	(7 94%)	52 69%					39
Northeast	Connecticut	Connecticut	904	64 77%	62 60%	2 16 %	63 78%	63 21%	0 57 %	69 68%	7				
	Hampton	Hampton	107	55 14%	55 21%	(0 07%)	57 38%	58 59%	(1 21%)	N/A			17		33
	Long Island	Long Island	1	100 00%	67 92%	32 08 %	72 05%	56 66%	15 39 %	N/A			8		17
	Massachusetts	Massachusetts	124	54 03%	57 78%	(3 75%)	59 83%	62 68%	(2 85%)	66 13%			16		31
	New Jersey		106	30 44%	39 68%	(9 24%)	33 08%	48 68%	(15 60%)	N/A			22		41
		Central	478	69 15%	65 70%	3 45 %	67 05%	65 04%	2 02 %	72 67%			14		
		Northeastern	82	47 63%	41 03%	6 60 %	48 46%	57 99%	(9 53%)	58 44%					38
		Northwestern	85	74 12%	82 47%	(8 36%)	73 45%	67 25%	6 20 %	78 98%					14
		Southwestern	101	78 96%	67 69%	11 27 %	70 89%	67 45%	3 44 %	76 78%					22
		Southwestern	100	58 00%	52 69%	5 31 %	58 15%	62 99%	(4 84%)	66 09%					32
	New York	New York	110	68 18%	62 92%	5 26 %	68 19%	68 54%	(0 35%)	74 48%					27
	Salisbury	Salisbury	86	53 49%	53 01%	0 48 %	52 57%	56 90%	(4 33%)	N/A			20		36
			2	50 00%	43 90%	6 10 %	36 15%	44 00%	(7 85%)	N/A			21		40
Pennsylvania	Pennsylvania		598	73 18%	67 91%	5 27 %	69 53%	67 73%	1 80 %	74 53%	4		10		
		Eastern	156	78 78%	76 32%	2 46 %	74 36%	70 54%	3 82 %	77 83%					10
		Northwest	107	58 34%	45 40%	12 94 %	50 93%	56 12%	(5 18%)	60 55%					37
		Pittsburgh	110	70 91%	77 06%	(6 16%)	72 64%	70 44%	2 20 %	76 65%					16
		Western	225	86 64%	77 08%	9 56 %	82 73%	74 16%	8 57 %	83 64%					1
Southeast	Kentucky	Kentucky	718	71 71%	77 59%	(5 88%)	76 78%	74 23%	2 55 %	80 30%	1				
	Maryland	Maryland	95	73 68%	79 78%	(6 09%)	78 89%	75 23%	3 66 %	82 39%			2		4
	Tennessee	Tennessee	74	48 65%	65 85%	(17 21%)	55 30%	57 82%	(2 52%)	62 45%			19		35
	Virginia	Virginia	76	77 63%	71 01%	6 62 %	80 91%	77 20%	3 71 %	83 88%			1		2
	W Virginia		65	62 99%	81 01%	(18 05%)	73 44%	66 96%	6 48 %	77 91%			7		15
		Central	408	71 46%	78 32%	(6 86%)	75 39%	75 17%	0 22 %	79 72%			5		
		Northern	101	69 97%	83 06%	(13 09%)	77 57%	77 14%	0 43 %	81 21%					6
		Southern	93	78 63%	70 30%	8 33 %	74 71%	77 06%	(2 34%)	79 14%					7
		Western	105	83 09%	73 87%	9 22 %	73 67%	77 27%	(3 61%)	78 54%					13
			109	67 06%	71 31%	(4 25%)	71 51%	67 23%	4 28 %	76 40%					20
Western	Arizona	Arizona	341	65 11%	63 69%	1 41 %	65 33%	60 52%	4 81 %	70 96%	6				
	California		45	73 33%	67 27%	6 06 %	69 43%	61 49%	7 94 %	75 00%			11		24
		Central	204	65 00%	63 97%	1 03 %	64 63%	60 35%	4 28 %	70 61%			15		
		Southern	111	59 46%	57 66%	1 80 %	60 04%	57 65%	2 39 %	67 58%					30
	New Mexico	New Mexico	93	68 20%	67 61%	0 59 %	67 27%	61 28%	5 99 %	72 38%					28
			92	63 04%	60 27%	2 77 %	69 36%	65 97%	3 39 %	74 94%			12		25



### Satisfaction with American Water System Overall





**FIRST DISCOVERY REQUEST INTERROGATORIES  
AND REQUESTS TO PRODUCE TO NASHVILLE GAS COMPANY  
BY THE CONSUMER ADVOCATE AND PROTECTION DIVISION  
OF THE OFFICE OF THE ATTORNEY GENERAL  
DOCKET NO. 03-00313  
JULY 8, 2003**

**Docket No. 04-000  
Exhibit CAPD-MI  
Schedule  
Page 1 of 0**

**DISCOVERY REQUEST NO. 8:**

In response to, "Filing Guidelines For Rate Cases" question 28, Nashville Gas provided a series of General Areas of customer service expectations, i e , Customer Service, Service Department, Meter Services, Construction

(a) Please provide the measurement data for each of the items referenced in your response by month, by year since 1998

(b) Additionally, have any additions/reductions in employment levels in these areas had an effect on service quality? Please detail the effects indicated

**RESPONSE:** See attached

July 15, 2003

Discovery Request No. 8:

In response to, "Filing Guidelines For Rate Cases" question 28, Nashville Gas provided a series of General Areas of customer service expectations; i.e., Customer Service, Service Department, Meter Services, Construction.

- (a) Please provide the measurement data for each of the items referenced in your response by month, by year since 1998.
- (b) Additionally, have any additions/reductions in employment levels in these areas had an effect on service quality? Please detail the effects indicated.

(a)

Customer Service

1998                      1999                      2000                      2001                      2002

# Calls Received (% Answered)	247,973 (91%)	207,018 (89%)	219,353 (92%)	259,548 (84%)	234,692 (92%)
Average Answer Time (Min )	1 27	1 47	1 17	2 33	0 16
Length of Call (Min )	****	****	2 34	2 54	2 38
After Call Processing Time (%)	****	****	2 03%	3 34%	1 91%
Number of Walk-Ins	****	****	12,310	19,107	13,272
Customer Call Backs	****	****	13,285	16,000	12,381
Supervisor Referrals	****	****	214	948	622
Cash Transactions Processed (Nashville)	84,162	93,769	123,862	173,727	155,092

\*\*\*\* Data Unavailable

## Service Department

### 2001 Service Department Statistics

	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug</u>	<u>Sept</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Orders Worked	6974	8076	8245	8938	7712	7856	6808	7756	13782	8511	13170	
Appt Orders	473	516	449	466	393	382	455	1048	1559	1219	846	
Appt Missed	3	3	3	0	0	0	0	0	1	8	0	
Emergency Ord	659	532	***	451	375	417	375	478	780	676	623	
Emerg Resp (min)	23	21	26	24	22	21	6	8	11	6	9	
Meters Set	411	363	293	302	380	368	421	717	414	565	439	
Appliances Instal.	198	154	193	172	172	236	142	193	209	***	***	

### 2002 Service Department Statistics

	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug</u>	<u>Sept</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Orders Worked	8445	7655	7285	7737	8844	8099	7831	8803	8959	12469	10072	8879
Appt. Orders	803	707	554	625	614	591	622	841	1019	1602	1133	959
Appt. Missed	0	2	0	1	1	0	2	3	3	7	0	2
Emergency Ord.	740	589	510	486	470	419	458	398	393	633	614	752
Emerg Resp (min)	8	5	10	6	6	10	6	7	18	17	7	14
Meters Set	503	383	323	***	323	342	468	449	422	691	693	658
Appliances Instal	***	173	203	158	182	200	149	173	143	190	249	186

## 2003 Service Department Statistics

	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>
Orders Worked	8515	7300	8435	8692	9785
Appt Orders	916	760	626	735	811
Appt Missed	0	0	0	0	1
Emergency Ord	668	534	551	454	452
Emerg Resp.(min)	6	6	6	7	6
Meters Set	480	349	300	234	280
appliances Instal.	203	168	193	153	159

\*\*\* Data Unavailable

\*\*\*\* 1998, 1999, 2000 Data Unavailable

## Construction Department

	1998	1999	2000	2001	2002
Tn 1 Call Tickets	44,700	49,135	62,211	48,273	52,583
Service Orders Received	5,487	5,950	4,763	4,567	4,391
Service Orders Installed	4,949	5,620	4,869	4,311	4,333
Backlog (Weeks)	6	5	4	5	3 <sup>u</sup>
Damages	190	218	316	262	216 <sup>u</sup>
Service Renewal/Relocate *	307	165	202	211	146 <sup>u</sup>
Services Retired * <sup>v</sup>	282	266	245	296	329 <sup>u</sup>
Survey Leaks	492	1,178	1,476	1,128	749

Note \* Does not include services renewed or retired from cast iron / bare steel main replacement program

Meter Services

1998                      1999                      2000                      2001                      2002

# Meters Read	1,643,569	1,701,814	1,771,927	1,818,926	1,861,389
Risers Inspected	75,933	85,802	87,474	92,319	110,180
Estimates	1,549	1,311	1,310	1,286	1,218
% Estimated	0.08%	0.08%	0.07%	0.07%	0.06%
Skips	8,503	5,512	3,906	3,759	3,569
Re-reads	6,952	4,201	2,909	2,470	2,351
Door Tags	10,216 *	22,008	29,089	42,254	42,321 *
DNPs Worked	2,015 *	4,822	5,335	7,368	5,573 *

\* 6 months Data Not Available

(b)

Nashville Gas' manpower has remained virtually flat over the last several years. With the addition of customer service enhancements such as, Integrated Voice Response, Call Center vectoring to the Customer Information Center (CIC) in Charlotte, NC, and an enhanced WEB site with customer contact points, Nashville Gas feels staffing is adequate to provide quality service to our customer base.

**Interrogatories and Requests for Production  
Of Documents by the  
Attorney General (First Set)  
To Tennessee-American Water Company  
Rate Case No. 03-00118**

69. Q. FOR EACH MONTH OF THE 12 MONTH PERIOD ENDING JULY 31, 2002, PROVIDE FOR EACH CUSTOMER CLASS THE NUMBER OF ESTIMATED BILLS RENDERED AND THE NUMBER OF BILLS ISSUED.

A See attached.



Aug 01 - July 02

	Aug 01	Sept 01	Oct 01	Nov 01	Dec 01	Jan 02	Feb 02	Mar 02	April 02	May 02	Jun 02	Jul 02	12 Mos Ending
Actual Number of Bills	70,813	70,493	70,493	70,415	69,956	70,794	70,022	70,186	71,350	70,430	70,418	71,825	847,195
Number of Estimated Bills	5,910	12,316	12,316	12,778	27,439	12,623	11,133	19,976	12,641	15,924	18,095	8,141	166,292

1997													
Actual Number of Bills													822,547
Number of Estimated Bills													11,477
1998													
Actual Number of Bills													829,022
Number of Estimated Bills													36,609
1999													
Actual Number of Bills													839,513
Number of Estimated Bills													65,433
2000													
Actual Number of Bills													844,164
Number of Estimated Bills													55,963
2001													
Actual Number of Bills													847,778
Number of Estimated Bills													119,984
2002													
Actual Number of Bills													850,164
Number of Estimated Bills													163,809

1.47%

4.42%

7.79%

6.63%

14.15%

19.27%